

Title (en)

DRIVERLESS VEHICLE GUIDANCE SYSTEM AND METHOD

Title (de)

LEITSYSTEM UND -VERFAHREN FÜR FAHRERLOSES FAHRZEUG

Title (fr)

PROCEDE ET SYSTEME DE GUIDAGE DE VEHICULE SANS CONDUCTEUR

Publication

EP 1453716 B1 20060913 (EN)

Application

EP 02787015 A 20021211

Priority

- US 0239609 W 20021211
- US 34119501 P 20011212

Abstract (en)

[origin: US2003106731A1] A vehicle guidance system for guiding a vehicle along a magnetic marker including a first magnetic sensor having a sensing axis, the first sensor measuring a first magnetic field. A second magnetic sensor has a sensing axis, the second sensor measuring a second magnetic field. The sensing axis of the second magnetic sensor crosses the sensing axis of the first magnetic sensor at a vehicle guide point. A processor is configured to receive data representative of the magnetic field measured by the first and second sensors and to calculate a lateral offset between the guide point and the magnetic marker based upon the measured magnetic fields. A method for guiding a vehicle in response to a marker having magnetic field is also disclosed. The steps of the method include measuring magnetic field strength proximate the marker, measuring ambient magnetic field strength remote from the marker, nulling the ambient magnetic field by removing the remote magnetic field strength from the proximate magnetic field strength, calculating a lateral displacement between the vehicle and the marker using the nulled magnetic field strength, and guiding the vehicle in response to the lateral displacement between the vehicle and the marker.

IPC 8 full level

B62D 1/24 (2006.01); **B60T 7/16** (2006.01); **B62D 1/28** (2006.01); **G05D 1/02** (2006.01)

CPC (source: EP US)

B60T 7/16 (2013.01 - EP US); **B62D 1/28** (2013.01 - EP US); **B62D 1/283** (2013.01 - EP US); **G05D 1/0263** (2024.01 - EP US)

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

US 2003106731 A1 20030612; US 6971464 B2 20051206; AU 2002351358 A1 20030623; CA 2469652 A1 20030619; CA 2469652 C 20080729; CN 100345715 C 20071031; CN 1602263 A 20050330; DE 60214761 D1 20061026; DE 60214761 T2 20061228; EP 1453716 A1 20040908; EP 1453716 A4 20050316; EP 1453716 B1 20060913; ES 2268122 T3 20070316; HK 1070870 A1 20050630; WO 03049988 A1 20030619

DOCDB simple family (application)

US 31649602 A 20021211; AU 2002351358 A 20021211; CA 2469652 A 20021211; CN 02824893 A 20021211; DE 60214761 T 20021211; EP 02787015 A 20021211; ES 02787015 T 20021211; HK 05103597 A 20050427; US 0239609 W 20021211